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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/070,271 | 06/13/2002 | Shane Willard Nickson | 22748/1 | 2417 |

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EXAMINER

PHAM, HUONG Q

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3764

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,271

Applicant(s)

NICKSON, SHANE WILLARD

Examiner

Huong Q. Pham

Art Unit

3764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-15 and 17-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 15, 17-25 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 17-18 are rejected under 35 U.S.C. 103(a) as obvious over Hall in view of the publication WO 95/31950. As for claim 13, Hall shows the claimed feature of claims 13 including a strapping member 14, an anterior longitudinal stiffener 10, a strut 30 (32, 36, 34), a sole plate 40. Note that Hall teaches that “ When desire, the shape or thickness of the yoke or stirrup can be controlled to control the amount of flexion between the foot base and the leg support (column 3, lines 31-34), and “ a unitary construction permitting flexure of the foot relative to the ankle without the use of hinged members and the like” (column 3, lines 55-57) . Thus, Hall teaches that the thickness or shape of the strut 30 (32, 36, 34) can be varied in order to achieve the desired amount of flexion between the anterior longitudinal stiffener 10 and the foot base 40. Note that the brace of Hall is made of thermoplastic material. While it is not clear what type of thermoplastic material the brace of Hall is made from , the publication WO 95/31950 teaches a joint orthosis with a strapping member 1, joined reinforcement elements 2A , 2B made of reinforced resin materials which can be applied to an ankle joint (Page 1, lines 15-17; page 2, lines 35, 36). In view of this teaching of the publication WO 95/31950, it would

Art Unit: 3764

have been obvious to an ordinary skill in the art at the time the invention was made to use a reinforced resin material for the brace of Hall in order to make a light and strong orthopedic brace. Note that "rigid" is a relative term. Note that Hall teaches that the thickness or shape of the strut 30 (32, 36, 34) can be varied in order to achieve the desired amount of flexion between the anterior longitudinal stiffener 10 and the foot base 40. In order to achieve the desired amount of flexion between the anterior longitudinal stiffener 10 and the foot base 40, by varying the thickness of the strut 30 (32, 36, 34), the strut 30 (32, 36, 34) can be "resiliently and flexibly configurable" as recited, and the anterior longitudinal stiffener 10 can be "inflexibly rigid" (compared to the strut). Also, note that the strut 30 of Hall "extending to the sole plate at an outside thereof, and anterior of a position of the ankle". As for claim 17, note the strap 18 of Hall. Note that the provision of plurality of straps for securing a brace to the leg of a wearer is very well-known in the art, and it would have been obvious to an ordinary skill in the art at the time the invention was made to provide more than one strap for the brace of Hall in order to firmly secure the brace to the leg of a wearer. As for claim 18, note that the strapping of Hall is made of thermoplastic material, and note that "soft" is a relative term. A material which is "soft" to one person may be considered to be "hard" to another person.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hall as applied to claims 13, 17-18 above, and further in view of Willner et al. While Hall does not mention about a sole plate with different portions having different strength and flexibility, Willner et al teaches a footplate 5 with this structure. In view of the teaching of Willner et al, it would have been

Art Unit: 3764

obvious to an ordinary skill in the art at the time the invention was made to provide the foot pad 40 of Hall with different portions having different strength and flexibility in order to allow flexion of the foot and promote a more natural gait.

Claims 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall in view of DeToro and/or DiBenedetto. Note that DeToro and DiBenedetto teach a channel with an opening for the stiffener to allow length adjustment for the brace. In view of the teaching of DeToro and/or DiBenedetto, it would have been obvious to an ordinary skill in the art at the time the invention was made to provide a channel and an opening for the brace of Hall in order to provide length adjustment and good fit. The provision of a channel to provide length adjustment for a brace and therefore providing a good fitting for a wearer is well known in the art, and therefore is not patentable over prior art. As for claim 22, note that the phrase "...said anterior....is longitudinal movable...." is only a functional statement without any positive recitation of necessary structure to support this recited function.

Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huong Q. Pham whose telephone number is (703) 305-5129. The examiner can normally be reached on 6:30 AM - 3:00 PM.

Art Unit: 3764

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on (703) 308 - 2698. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



May 1, 2004

NICHOLAS D. LUCCHESI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700